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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,587	02/27/2002	Hitoshi Ebiara	SCEISZ 3.0-124	8684

530 7590 12/31/2003

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EXAMINER

CHEN, PO WEI

ART UNIT PAPER NUMBER

2676

DATE MAILED: 12/31/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,587

Applicant(s)

EBIHARA, HITOSHI

Examiner

Po-Wei (Dennis) Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other:

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DETAILED ACTION

Claims 1-18 are pending in this application. Claims 1, 8, 11, 14 and 16-18 are independent claims.

The present title of the invention is "Information Processing System, Integrated Information Processing System, Method for Calculating Execution Load, and Computer Program". This action is non-final.

The Group Art Unit of the Examiner case is now 2676. Please use the proper Art Unit number to help us serve you better.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 8-13 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Bishop et al. (US 6,049,798; refer to as Bishop herein).

3. Regarding claim 1, Bishop discloses a real time internal resource monitor for data processing system comprising:

An information processing system (lines 1-3 of abstract; information such as CPU utilization is being processed);

A processor operable to carry out predetermined information processing; a signal producing unit operable to produce an execution enabling signal for causing said processor to carry out said predetermined information processing (lines 10-12 of column 23; a computer

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processor event of corresponds to information processing and start signal of the event corresponds to an execution enabling signal);

A load determination unit operable to determine an execution load associated with said predetermined information processing (lines 3-9 and 14-16 of column 24 and Fig. 9; the data processing program in Fig. 9 functions as a load determination unit by calculating the processor resource utilized (execution load) by the event processed);

Processor being operable to begin execution of said predetermined information processing in response to receipt of said execution enabling signal and to produce an execution termination signal upon completion of said predetermined information processing, said execution termination signal representing said completion of said predetermined information processing (lines 10-12 and 33-34 of column 23; it is noted that the processor system will start and end executing the event (information processing) according to the signals);

Load determination unit being operable to begin determination of said execution load in response to receipt of said execution enabling signal and to terminate said determination of said execution load in response to receipt of said execution termination signal (lines 33-45 of column 23 and lines 14-16 of column 24 and Fig. 9; the data processing program in Fig. 9 functions as a load determination unit by analyzing the performance data such as processor resource utilization (execution load) in accordance of the start and end event signals).

4. Regarding claim 2, Bishop discloses a real time internal resource monitor for data processing system comprising:

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A presentation unit operable to provide to a user a real-time presentation of a measurement of said execution load determined by said load determination unit (lines 12-15 of column 3 and lines 3-20 of column 24 and Fig. 9).

5. Regarding claim 3, Bishop discloses a real time internal resource monitor for data processing system comprising:

Load determination unit clears a previous measurement of said execution load already determined in response to said receipt of said execution enabling signal and begins determination of a new measurement (lines 46-63 of column 9 and Fig. 9; it is noted that the resource utilization is being measured by the busy count and which is reset for a new event in order to get the total count. Thus, this functions as clears a previous measurement.).

6. Regarding claim 4, Bishop discloses a real time internal resource monitor for data processing system comprising:

Processor operates in response to clock signals, and wherein said load determination unit determines said execution load by counting a number of said clock signals from a beginning to an end of said predetermined information processing (lines 46-63 of column 9 and lines 4-16 of column 24 and Fig. 9; the load determination unit (Fig. 9) determines the resource utilization (execution load) by counting the busy signals received during the time of the event was executed. The counting of busy signals during time interval functions as clock signals).

7. Regarding claim 5, Bishop discloses a real time internal resource monitor for data processing system comprising:

Load determination unit includes a presentation unit operable to provide a presentation of a measurement of said execution load which varies in form in real time depending on said

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measurement of said execution load (lines 12-15 of column 3, lines 54-67 of column 9 and lines 1-16 of column 9 and Fig. 6-7 and 9; the load determination unit (Fig. 9) has a display result unit which display the measurements of the resource utilized (execution load) in real time. While claim recites varies in form, the term is broad enough to include the functions such as setting color and time periods which will gives different display results depending on the viewing period and sampling period set).

8. Regarding claims 8-10, statements presented above, with respect to claims 1-3 are incorporated herein. Furthermore, while claim recites the information processing having two or more steps and carried out one step after another step in a successive manner. It is noted that the event processing disclosed by Bishop contains at least two steps (start and end) which are processed in successive manner. While claim recites predetermined cycle, it is noted that the event processing is predefined, thus, the cycle of the process is also predefined.

9. Regarding claim 11, statements presented above, with respect to claim 1 are incorporated herein. Furthermore, the event start signal and event end signal correspond to first and second enabling signal to the information processing (event processing), respectively.

10. Regarding claim 12, Bishop discloses a real time internal resource monitor for data processing system comprising:

Load determination unit produces a value representing said execution load when said first enable signal is changed to said second enable signal (lines 10-14 of column 23 and lines 14-16 of column 24 and Fig. 9; the load determination unit (Fig. 9) will produce the values such as processor utilization in accordance with the event end signal (second enable signal)).

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Regarding claim 13, statements presented above, with respect to claim 2 are incorporated herein. Furthermore, it is noted that the busy count is operated in accordance with the event start (first enable signal) signal and even end (second enable signal) signal. Thus, the load determination unit will reset or clears the measurement of busy count for new event start signal.

11. Regarding claim 16, statements presented above, with respect to claim 1 are incorporated herein.

12. Regarding claim 17, statements presented above, with respect to claims 1 and 8 are incorporated herein.

13. Regarding claim 18, statements presented above, with respect to claim 1 are incorporated herein. Also see Fig. 1 and 14.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop et al. (US 6,049,798; refer to as Bishop herein).

16. Regarding claim 14, statements presented above, with respect to claims 1 are incorporated herein. Furthermore, Bishop discloses a real time internal resource monitor for data processing system comprising:

A plurality of information processing systems (lines 4-6 of column 23 and Fig. 1;

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multiple processors are being disclosed and each processor can be a separated system connected to the monitoring unit);

A presentation unit (lines 52-53 of column 4 and Fig. 1);

It is noted that while claim recites each system has a separated load determination unit.

However, the load determination unit disclosed by Bishop is able to handle multiple processor system, thus, it would have been obvious matter of design choice to modify Bishop by having each processor has a separated load determination unit, since applicant has not disclose having separated load determination unit solves any stated problem and it appears that the system would perform equally well with the systems having one load determination unit.

17. Regarding claim 15, Bishop discloses a real time internal resource monitor for data processing system comprising:

Plurality of information processing systems are housed in a housing, said presentation unit being arranged on a front surface of said housing in a corresponding relationship with said processor of each of said information processing systems (lines 50-64 of column 4 and Fig. 1; while claim recites housing, the term is broad enough to include the system disclosed by Bishop which is being set up as a single system and is being arranged in accordance of Fig. 1 for each processor system. While Bishop does not specifically recite the presentation unit being arranged on a front surface, it would have been obvious matter of design choice to modify Bishop by having the presentation unit arranged on a front surface, since applicant has not disclose having separated load determination unit solves any stated problem and it appears that the system would perform equally well to arrange the placement of the unit anywhere the user desired to serve its function).

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18. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop et al. (US 6,049,798; refer to as Bishop herein) as applied to claim 1 above, and further in view of Bhatt et al. (US 6,097,399; refer to as Bhatt).

19. Regarding claims 6 and 7, Bishop does not disclose the presentation unit includes a plurality of light-emitting components, said presentation unit varying a number of said light-emitting components which are lit depending on said measurement of said execution load; presentation unit includes a light-emitting component capable of emitting light beams of different colors, said presentation unit varying the color of said light beams depending on said measurement of said execution load. Bhatt discloses a display of visual data utilizing such display (lines 13-36 of column 12 and Fig. 6-7; while claim recites plurality of light-emitting components, the term is broad enough to include the plurality of data items each represented by a light controlled square. And each light control square varies in colors and/or shades with the measurement of the processor load. Also, while claim recites light-emitting components are lit, it is noted that by having color such as black, the particular area corresponds to not lit on the display). It would have been obvious to one of ordinary skill in the art to utilize the teaching of Bhatt to provide the user a better comprehensive display of data in a more accurate and/or efficient manner (lines 12-18 of column 1, Bhatt). Also, both Bishop and Bhatt are directed to displaying processor utilization data. By using the display disclosed by Bhatt is only a matter of substituting a more specific type of display in place of the one disclosed by Bishop.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Brock et al. (US 6,473,085);

Morozumi (US 6,570,571);

Alford, JR. et al. (US 2003/0006988).

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Po-Wei (Dennis) Chen whose telephone number is (703) 305-8365. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C Bella can be reached on (703) 308-6829. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Po-Wei (Dennis) Chen
Examiner
Art Unit 2676

Po-Wei (Dennis) Chen
December 24, 2003



**MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
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